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EXAMINER

LE, MIRANDA

ART UNIT	PAPER NUMBER
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2167

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/929,278	Applicant(s) BENTLEY, KEITH	
	Examiner Miranda Le	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/26/2005 has been entered.

2. This communication is responsive to Amendment, filed 01/26/2005.

Claims 1-82 are pending in this application. Claims 1, 3, 13, 28, 39, 58, 66, 74 are independent claims. In the Amendment, claims 1-3, 15, 28, 39, 58, 66, 74 have been amended, no claims have been added or cancelled. This action is made non-Final.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 29, 57 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For purposes of consistency, "control element list" should be read as "control element list storage"; "graphic element list" should be read as "graphic element list storage"; "element chunk" should be read as "element chunk stream(s)". Please also correct all such errors throughout the other claims. Appropriate correction is required.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) reference characters “20”, “60”, “80” has been used to designate both clients, servers (see Fig. 1). It is suggested that the references should be labeled as “20a”, “20b” (or 20, 20’); “60a”, “60b”, (or 60, 60’); “80a”, “80b”, (or 80, 80’).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless:

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined

Art Unit: 2167

in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-2, 58, 60, 62, 66, 68, 70, 74, 76, 78, 82 are rejected under 35 U.S.C. 102(e) as being anticipated by Crow et al. (US Patent No. 6,654,772 B1).

Crow anticipated independent claims 1, 58, 66, 74, by the following:

As per claim 1, Crow teaches a computer readable medium containing a file for storing a root storage (Fig. 5, root directory, col. 3, line 49 to col. 4, line 12) including a model directory storage (Fig. 5, directory 61, 62) comprising at least one model storage, wherein said at least one model storage comprises a model header (i.e. header in block 61 and Directory header in block 62, col. 3, line 49 to col. 4, line 12).

As per claim 2, Crow teaches said at least one model storage further comprises at least one element list storage (i.e. inode in Fig. 5) including at least one element chunk stream (i.e. block 80, Fig. 5), wherein said at least one element chunk stream comprises an element chunk header (inodes, Fig. 5) and at least one element (i.e. length 3) associated with said element chunk header (col. 3, line 49 to col. 4, line 12, Fig. 5).

As to claims 58, 66, 74, Crow teaches a computer readable medium containing a file for storing an element list storage (i.e. directory 61, 62, Fig. 5) including at least one element chunk stream (i.e. inode, col. 3, line 49 to col. 4, line 12, Fig. 5), wherein said at least one element chunk stream comprises an element chunk header (i.e. header in each inode, see Fig. 5) for storing information about the at least one element chunk (i.e. LV1,

Art Unit: 2167

length 3, flag, col. 4, lines 4-63) and at least one variable sized element (i.e. length 3) associated with said element chunk header (col. 4, lines 4-63).

As to claims 60, 68, 76, Crow teaches said element list is a control element list (col. 4, lines 4-63).

As to claims 62, 70, 78, Crow teaches element list is a global control element list (col. 4, lines 4-63).

As per claim 82, Crow teaches the element chunks have unique names (i.e. inode 63, inode 64) within element lists (col. 3, line 49 to col. 4, line 12, Fig. 5).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner

Art Unit: 2167

to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 3-5, 7, 15, 18, 27-29, 38-39, 43-44, 48-49, 53, 56-57, 59, 61, 67, 69, 75, 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crow et al. (US Patent No. 6,654,772 B1), in view of Atkinson et al. (US Patent No. 5,506,983).

As per claim 3, Crow teaches a computer readable medium containing a file for storing a root storage (i.e. root directory in Fig. 5, col. 3, lines 49-57) including a model directory storage (directory 61, 62, Fig. 5) comprising a plurality of model storages (col. 3, line 49 to col. 4, line 12) wherein each of said plurality of model storages is for grouping related elements (i.e. inodes, Fig. 5), is identifiable by a unique identifier (i.e. inode 63, inode 64), and comprises a model header stream (i.e. headers in Fig. 5), a control element list storage (i.e. extent 1, extent 2, Fig. 5, col. 4, lines 4-12) containing at least one element chunk stream (i.e. Block 80, Fig. 5), wherein each said element chunk stream comprises an element chunk header (i.e. LV 1, length 3, flag in Fig. 5, col. 4, lines 4-63) and at least one variable sized element (i.e. length 3, Fig. 5, col. 4, lines 4-63) associated with its respective element chunk header.

Crow does not explicitly teach a graphic element list storage containing at least one element chunk stream, but Atkinson teaches a graphic element list storage (i.e. graph object, Fig. 1) containing at least one element chunk stream (i.e. XY Data, Fig. 1, col. 4, lines 26-39).

It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine the cited references because Atkinson's suggestion of having a graphic element list storage containing at least one element chunk stream

Art Unit: 2167

would have allowed Crow's users to manipulate objects within an object hierarchy and map an object hierarchy into a single file system file so that multiple objects can be stored within a single file.

As to claims 15, 28, Crow teaches a computer program product comprising a computer readable medium having a computer program logic stored therein, the computer program logic comprising: means for enabling a computing unit to store a root storage comprising a model directory in a storage area (col. 3, line 49 to col. 4, line 12, Fig. 5),

means for enabling said computing unit to store at least one model in said model directory, wherein said at least one model storage comprises a control element list storage having element chunks streams containing control elements (col. 4, lines 4-63),

Crow does not explicitly teach a graphic element list storage having element chunks streams containing graphic elements, but Atkinson teaches a graphic element list storage (i.e. graph object, Fig. 1) containing at least one element chunk stream (i.e. XY Data, Fig. 1, col. 4, line 26 to col. 5, line 35).

It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine the cited references because Atkinson's suggestion of having a graphic element list storage having element chunks streams containing graphic elements would have allowed Crow's users to manipulate objects within an object hierarchy and map an object hierarchy into a single file system file so that multiple objects can be stored within a single file.

As per claim 39, Crow teaches a computer program product comprising a computer readable medium having computer program logic, the computer, program logic comprising: means for enabling a computer system to store at least one root storage in a storage area (col. 3, line 49 to col. 4, line 12, Fig. 5);

means for enabling said computer system to store at least one model directory storage in said at least one root storage (col. 3, line 49 to col. 4, line 12, Fig. 5);

means for enabling said computer system to store at least one model storage in said model directory storage (col. 3, line 49 to col. 4, line 63, Fig. 5);

means for enabling said computer system to store in said at least one model storage a control element list storage having element chunk streams containing variable sized control elements (col. 4, lines 4-63);

means for enabling said computer system to assign a preselected number of elements to each said element chunk stream (col. 4, lines 4-63, col. 6, lines 9-39);

means for enabling said computer system to allocate each of said preselected number of elements to an element chunk stream in one of said control element list storage col. 35, lines 1-22, col. 36, lines 25-59, Fig. 17.

Crow does not explicitly teach means for enabling said computer system to store in said at least one model storage a graphic element list storage having element chunk streams containing variable sized graphic elements, and means for enabling said computer system to allocate each of said preselected number of elements to an element chunk stream in one of said graphic element list storage, but Atkinson teaches these limitations at col. 4, lines 26-39, Fig. 1).

It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine the cited references because Atkinson's suggestion of means for enabling said computer system to store in said at least one model storage a graphic element list storage having element chunk streams containing variable sized graphic elements; and means for enabling said computer system to allocate each of said preselected number of elements to an element chunk stream in one of said graphic element list storage would have allowed Crow's users to obtain an object that has multiple streams and is conceptually stored in a storage instance and its data is stored in one or more stream or storage instances within the storage; and to manipulate objects within an object hierarchy and map an object hierarchy into a single file system file so that multiple objects can be stored within a single file (col. 4, lines 12-25).

As to **claims 4, 29**, Crow teaches said root storage further comprises a control model storage containing a control model header, a global control element list storage, wherein said global control element list storage contains element chunk streams including global elements (col. 2, lines 31-44).

Crow does not explicitly teach a global graphic element list storage, wherein said global graphic element list storage contains element chunk stream including global elements, but Atkinson teaches these limitations at col. 4, line 26 to col. 5, line 35, Fig. 1).

It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine the cited references because Atkinson's suggestion of a control model storage containing a global graphic element list storage, wherein said

Art Unit: 2167

global graphic element list storage contains element chunk stream including global elements would have allowed Crow's users to obtain an object that has multiple streams, and is conceptually stored in a storage instance and its data is stored in one or more stream or storage instances within the storage; and to manipulate objects within an object hierarchy and map an object hierarchy into a single file system file so that multiple objects can be stored within a single file (col. 4, lines 12-25).

As per claim 5, Crow teaches said global elements contain information relevant for all models in said model directory storage (col. 2, lines 31-44, col. 3, lines 13-35).

As to claims 7, 27, 38, 56, Crow teaches said root storage further comprises at least one of a stream or a storage, which are not contained in said model directory (col. 3, line 49 to col. 4, line 63).

As per claim 18, Crow teaches means for enabling the computing unit to store a control model in said root storage (i.e. Fig. 5, col. 3, line 49 to col. 4, line 12), wherein said control model storage includes a global control element list storage (i.e. inode, Fig. 5, col. 3, line 49 to col. 4, line 12), and said global control element list storage contains at least one global element chunk stream having at least one global control element (Fig. 5, col. 3, line 49 to col. 4, line 63).

Crow does not explicitly teach the following limitations. However, Atkinson teaches said control model storage includes a global graphic element list storage (i.e. graph object, Fig. 1, col. 4, lines 26-39), wherein said global graphic element list storage

Art Unit: 2167

contains at least one global element chunk stream (i.e. XY data, Fig. 1, col. 4, lines 26-39) having at least one global graphic element (i.e. Title data, Fig. 1, col. 4, lines 26-39).

It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine the cited references because Atkinson's suggestion of having said control model storage includes a global graphic element list storage, wherein said global graphic element list storage contains at least one global element chunk stream having at least one global graphic element would have allowed Crow's users to obtain an object that has multiple streams, and is conceptually stored in a storage instance, and its data is stored in one or more stream or storage instances within the storage; and to manipulate objects within an object hierarchy and map an object hierarchy into a single file system file so that multiple objects can be stored within a single file (col. 4, lines 12-25).

As to claims 43, 48, Crow teaches said preselected number is a maximum number (col. 6, lines 9-59).

As per claim 44, Crow teaches means for enabling said computer system to create an additional element chunk when the number of elements exceeds said preselected number of elements assigned to each element chunk (col. 6, lines 19-59);

means for enabling said computer system to assign a preselected number of elements to said additional element chunk (col. 6, lines 19-59);

means for enabling said computer system to store new elements in said additional element chunk (col. 6, lines 19-59).

As per claim 49, Crow teaches means for enabling said computer system to associate a header with said at least one root storage (col. 3, line 49 to col. 4, line 63).

As per claim 53, Crow teaches said storage area is a file (col. 3, lines 36-57).

As per claim 57, Crow teaches means for enabling said computer system to store a control model in each root storage (col. 3, line 39 to col. 4, line 12).

Crow does not explicitly teach the following limitations. However, Atkinson teaches means for enabling said computer system to store a graphic element list and a control element list in each control model (col. 4, lines 26-39).

means for enabling said computer system to allocate elements to element chunks in said control element list and said graphic element list (col. 4, lines 26-39).

means for enabling said computer system to compress each element chunk to be stored in said graphic element list or said control model list in said control model directory (col. 4, lines 26-39).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow with the teachings of Atkinson to include all the claimed limitations hereinabove because Atkinson's suggestion of enabling said computer system to store a graphic element list and a control element list in each control model; enabling said computer system to allocate elements to element chunks in said control element list and said graphic element list; enabling said computer system to compress each element chunk to be stored in said graphic element list or said control

Art Unit: 2167

model list in said control model directory would have allowed Crow's users to obtain an object that has multiple streams, and is conceptually stored in a storage instance, and its data is stored in one or more stream or storage instances within the storage; and to manipulate objects within an object hierarchy and map an object hierarchy into a single file system file so that multiple objects can be stored within a single file (col. 4, lines 12-25).

As to claims 59, 67, 75, Crow does not specifically teach said element list is a graphic element list, but Atkinson teaches this limitation at (col. 4, lines 26-39).

It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine the cited references because Atkinson's suggestion of having said element list is a graphic element list would have allowed Crow's users to manipulate objects within an object hierarchy and map an object hierarchy into a single file system file so that multiple objects can be stored within a single file (col. 4, lines 12-25).

As to claims 61, 69, 77, Crow does not specifically teach said element list is a global graphic element list, but Atkinson teaches this limitation at (col. 4, lines 26-39).

It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine the cited references because Atkinson's suggestion of having said element list is a global graphic element list would have allowed Crow's users to manipulate objects within an object hierarchy and map an object hierarchy into a

Art Unit: 2167

single file system file so that multiple objects can be stored within a single file (col. 4, lines 12-25).

9. Claims 8-9, 14, 19-20, 25, 31-32, 37, 40, 45, 54, 63-64, 79-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crow et al. (US Patent No. 6,654,772 B1), in view of Atkinson et al. (US Patent No. 5,506,983), and further in view of Wolff et al. (US Patent No. 6,076,105).

As to claims 8, 19, 31, Crow, Atkinson do not specifically teach at least one element chunk in said graphic element list is compressed. However, Wolff teaches this limitation at col. 29, lines 21-43.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Wolff to include at least one element chunk in said graphic element list is compressed in order to reduce in size of data to save space or transmission time.

As to claims 9, 20, 32, Crow, Atkinson do not expressly teach at least one element chunk in said control element list is compressed. However, Wolff teaches this limitation at col. 29, lines 21-43.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Wolff to include at least one element chunk in said control element list is compressed in order to reduce in size of data to save space or transmission time.

Art Unit: 2167

As to claims 14, 25, 37, 54, Crow does not explicitly teach said root storage is adapted to be operable with a computer aided design program. However, Wolff teaches this limitation at col. 29, lines 21-43.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Wolff to include said root storage is adapted to be operable with a computer aided design program in order to allow users (i.e. architects, engineers, drafters, artists, and others) to efficiently create precision drawing or technical illustrations (i.e. create two-dimensional (2-D) drawings or three-dimensional (3-D) models).

As per claim 40, Crow, Atkinson do not specifically teach the following limitations. However, Wolff teaches:

means for enabling said computer system to compress each element chunk (col. 29, lines 21-43);

means for enabling said computer system to store at least one compressed element chunk in at least one of the graphic element list and control element list (col. 29, lines 21-43).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Wolff to include the hereinabove claimed limitations in order to reduce in size of data to save space or transmission time.

As per claim 45, Crow, Atkinson do not specifically teach means for enabling said computer system to compress each additional element chunk; means for enabling said computer system to store at least one additional compressed element chunk in at least one of said graphic element list and said control element list. However, Wolff teaches these limitations at col. 29, lines 6-61.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Wolff to include these claimed limitations in order to reduce in size of data to save space or transmission time.

10. Claims 6, 10-11, 16-17, 21-22, 26, 30, 33-34, 41, 46, 50-52, 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crow et al. (US Patent No. 6,654,772 B1), in view of Atkinson et al. (US Patent No. 5,506,983), and further in view of Bolosky et al. (US Pub. No. 2002/0194484 A1).

As to claims 6, 26, 30, 55, Crow teaches said root storage further comprises at least one of a first stream containing a header (col. 3, line 49 to col. 4, line 63), a second stream containing session information (col. 3, line 49 to col. 4, line 63), a fourth stream containing file properties (col. 3, line 49 to col. 4, line 63).

Crow, Atkinson do not expressly teach a third stream containing a manifest. However, Bolosky teaches this limitation at [0165], Figs. 12, 13.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the cited references because Bolosky's suggestion of a signed list of hash values which is known as a manifest would have allowed Crow's users to perform a

Art Unit: 2167

single signature computation in order to authenticate the writes to multiple files, rather than having to compute a separate signature for each file.

As to claims 10, 21, 33, Crow, Atkinson do not specifically teach at least one element chunk in said graphic element list is encrypted. However, Bolosky teaches this limitation at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Atkinson with the teachings of Bolosky to include at least one element chunk in said graphic element list is encrypted in order to prevent unauthorized users from reading data stored on the devices.

As to claims 11, 22, 34, Crow, Atkinson do not expressly teach at least one element chunk in said control element list is encrypted. However, Bolosky teaches this limitation at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Bolosky to include at least one element chunk in said control element list is encrypted in order to prevent unauthorized users from reading data stored on the devices.

As per claim 16, Crow, Atkinson do not explicitly teach said storage area is a memory unit in a network. However, Bolosky teaches this limitation at [0026] to [0028].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Bolosky to

Art Unit: 2167

include storage area is a memory unit in a network in order to facilitate management of and access to files stored remotely at the storage server over a network.

As per claim 17, Crow teaches said storage area is a memory unit in a workstation (col. 3, lines 13-35).

As per claim 41, Crow, Atkinson does not explicitly teach means for enabling said computer system to encrypt each element chunk; and means for enabling said computer system to store at least one encrypted element chunk in at least one of the graphic element list and control element list. However, Bolosky teaches this limitation at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Atkinson with the teachings of Bolosky to include the hereinabove claimed limitations in order to prevent unauthorized users from reading data stored on the devices.

As per claim 46, Crow, Atkinson do not explicitly teach means for enabling said computer system to encrypt each additional element chunk; and means for enabling said computer system to store at least one additional encrypted element chunk in at least one of said graphic element list and said control element list. However, Bolosky teaches this limitation at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Bolosky to

Art Unit: 2167

include the hereinabove claimed limitations in order to allow a user to quickly access a file, verify that it is indeed the requested file, and read/write that file, while insuring that the files are stored and access by non-authorized users.

As per claim 50, Crow, Atkinson do not explicitly teach said computer system is the Internet. However, Bolosky teaches this limitation at [0026] to [0028].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Bolosky to include said computer system is the Internet in order to facilitate management of and access to files stored remotely at the storage server over a network.

As per claim 51, Crow, Atkinson do not specifically teach said computer system is an Intranet. However, Bolosky teaches this limitation at [0026] to [0028].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Bolosky to include said computer system is an Intranet because it would help large enterprises allow users within their intranet to access the public Internet through firewall servers that have the ability to screen messages in both directions so that company security is maintained.

As per claim 52, Crow, Atkinson do not explicitly teach said computer system is a local area network. However, Bolosky teaches this limitation at [0026] to [0028].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Bolosky to

Art Unit: 2167

include said computer system is a local area network in order to facilitate management of and access to files stored remotely at the storage server over a network.

11. Claims 12-13, 23-24, 35-36, 42, 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crow et al. (US Patent No. 6,584,480), in view of Atkinson et al. (US Patent No. 5,506,983), and further in view of in view of Wolff et al. (US Patent No. 6,076,105), and Bolosky et al. (US Pub. No. US 2002/0194209 A1).

As to claims 12, 23, 35, Crow, Atkinson do not specifically teach at least one element chunk in said control element list is encrypted. However, Bolosky teaches this limitation at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson with the teachings of Bolosky to include at least one element chunk in said control element list is encrypted in order to prevent unauthorized users from reading data stored on the devices.

Crow, Atkinson and Bolosky do not explicitly teach at least one element chunk in said control element list is compressed. However, Wolff teaches this limitation at col. 29, lines 6-61.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow, Atkinson, Bolosky with the teachings of Wolff to include at least one element chunk in said control element list is compressed in order to reduce in size of data to save space or transmission time.

As to claims 13, 24, 36, Crow, Atkinson do not specifically teach at least one element chunk in said graphic element list is encrypted. However, Bolosky teaches this limitation at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Atkinson with the teachings of Bolosky to include at least one element chunk in said graphic element list is encrypted in order to prevent unauthorized users from reading data stored on the devices.

Crow, Atkinson and Bolosky do not explicitly teach at least one element chunk in said graphic element list is compressed. However, Wolff teaches this limitation at col. 29, lines 6-61.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Atkinson and Bolosky with the teachings of Wolff to include at least one element chunk in said graphic element list is compressed in order to reduce in size of data to save space or transmission time.

As per claim 42, Crow, Atkinson do not specifically teach means for enabling said computer system to compress and encrypt each element chunk; and means for enabling said computer system to store at least one encrypted and compressed element chunk in at least one of the graphic element list and the control element list.

However, Bolosky teaches means for enabling said computer system to encrypt each element chunk; and means for enabling said computer system to store at least one encrypted element chunk in at least one of the graphic element list and the control element list at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Atkinson with the teachings of Bolosky to include the hereinabove claimed limitation in order to allow a user to quickly access a file, verify that it is indeed the requested file, and read/write that file, while insuring that the files are stored and access by non-authorized users.

Crow, Atkinson and Bolosky do not expressly teach each element chunk is compressed, but Wolff teaches this limitation at col. 29, lines 6-61.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Atkinson, Bolosky with the teachings of Wolff to include each element chunk is compressed in order to reduce in size of data to save space or transmission time.

As per claim 47, Crow, Atkinson do not specifically teach means for enabling said computer system to compress and encrypt each additional element chunk; and means for enabling said computer system to store at least one additional encrypted and compressed element chunk in at least one of said graphic element list and said control element list. However, Bolosky teaches means for enabling said computer system to encrypt each additional element chunk; and means for enabling said computer system to store at least one additional encrypted element chunk in at least one of the graphic element list and the control element list at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Atkinson with the teachings of Bolosky to include the hereinabove claimed limitation in order to allow a user to quickly access a

Art Unit: 2167

file, verify that it is indeed the requested file, and read/write that file, all while insuring that the files are stored and access by non-authorized users.

Crow, Atkinson and Bolosky do not expressly teach each additional element chunk is compressed, but Wolff teaches this limitation at col. 29, lines 6-61.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Atkinson, Bolosky with the teachings of Wolff to include each element chunk is compressed in order to reduce in size of data to save space or transmission time.

12. Claims 63-64, 71-72, 79-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crow et al. (US Patent No. 6,584,480), in view of Wolff et al. (US Patent No. 6,076,105).

As to claims 63, 71, 79, Crow does not specifically teach at least one element chunk is compressed. However, Wolff teaches this limitation at col. 29, lines 6-61.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Crow with the teachings of Wolff to include at least one element chunk is compressed in order to reduce in size of data to save space or transmission time.

13. Claims 64, 72, 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crow et al. (US Patent No. 6,584,480), in view of Bolosky et al. (US Pub. No. 2002/0194484 A1).

As to claims 64, 72, 80, Crow does not expressly teach said at least one element chunk is encrypted. However, Bolosky teaches this limitation at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow with the teachings of Bolosky to include said at least one element chunk is encrypted in order to allow a user to quickly access a file, verify that it is indeed the requested file, and read/write that file, while insuring that the files are stored and access by non-authorized users.

14. Claims 65, 73, 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crow et al. (US Patent No. 6,654,772 B1), in view of Bolosky et al. (US Pub. No. 2002/0194484 A), and further in view of Wolff et al. (US Patent No. 6,076,105).

As to claims 65, 73, 81, Crow does not teach said at least one element chunk is encrypted. However, Bolosky teaches this limitation at [0039] to [0040], [0140].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow with the teachings of Bolosky to include said at least one element chunk is encrypted in order to prevent unauthorized users from reading data stored on the devices.

Crow and Bolosky do not explicitly teach said at least one element chunk is compressed. However, Wolff teaches this limitation at col. 29, lines 21-43.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Crow, Bolosky with the teachings of Wolff to

Art Unit: 2167

include said at least one element chunk is compressed in order to reduce in size of data to save space or transmission time.

Response to Arguments

15. Applicant's arguments regarding "independent claims 1, 3, 15, 28, 39, 58, 66, 74 have been amended to include allowable subject matter not taught by any of the references cited in the outstanding Office Action", have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

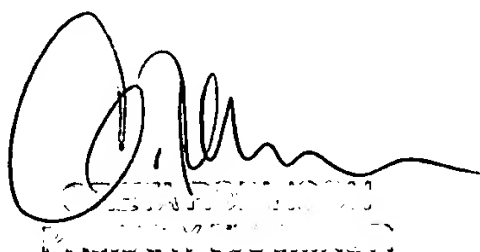
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene, can be reached on (571) 272-4107. The fax number to this Art Unit is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Miranda Le
March 18, 2005



John E. Breene
Supervisor